

**Section 1: PRODUCT AND COMPANY IDENTIFICATION**

Product name	Imicyafos Standard
Product code	091-06911
CAS No	140163-89-9
Formula	C ₁₁ H ₂₁ N ₄ O ₂ PS
Manufacturer	Wako Pure Chemical Industries, Ltd 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81 (0)6-6203-3741 Fax: +81 (0)6-6203-5964
Supplier	Wako Pure Chemical Industries, Ltd 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81 (0)6-6203-3741 Fax: +81 (0)6-6203-5964
Emergency telephone number	+81-6-6203-3741 / +81-3-3270-8571
Recommended uses and restrictions on use	For research purposes

Section 2: HAZARDS IDENTIFICATION**GHS classification****Classification of the substance or mixture**

Acute toxicity - Oral

Acute toxicity - Inhalation (Vapors)

Skin sensitization

aquatic environment (acute hazard)

Category 3 - (H301)

Category 4 - (H332)

Category 1 - (H317)

Category 1 - (H400)

Pictograms**Signal word**

Danger

Hazard statements

H301 - Toxic if swallowed

H317 - May cause an allergic skin reaction

H332 - Harmful if inhaled

H400 - Very toxic to aquatic life

Precautionary statements-(Prevention)

- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- Contaminated work clothing should not be allowed out of the workplace
- Protective gloves
- Avoid release to the environment

Precautionary statements-(Response)

- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation or rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Rinse mouth
- Collect spillage

Precautionary statements-(Storage)

- Store locked up

Precautionary statements-(Disposal)

- Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture

Substance

Formula

C11H21N4O2PS

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS No
Imicyafos	98.0	304.35	N/A	8-(2)-2173	140163-89-9

Impurities and Stabilizing additives No
which constitute the substance

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air Immediate medical attention is required

Skin contact

Wash off immediately with soap and plenty of water Immediate medical attention is required

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes Call a physician immediately

Ingestion

Call a physician or poison control center immediately Rinse mouth

Protection of first-aiders

Use personal protective equipment as required Avoid contact with skin, eyes or clothing

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), carbon dioxide (CO2), Foam, Extinguishing powder,

Unsuitable extinguishing media

No information available

Special extinguishing method

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Protection of fire-fighters

Use personal protective equipment as required Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated See Section 12 for additional ecological information

Methods and materials for contaminant and methods and materials for cleaning up

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed. Please wash the rest with plenty of water. Absorb the product flowing out on the water to soak the absorber.

Recovery, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations

Section 7: HANDLING AND STORAGE

Handling**Technical measures**

Highly flammable. Avoid contact with high temperature objects, spark, and strong oxidizing agents. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Use personal protective equipment as required Avoid contact with skin, eyes or clothing Wash contaminated clothing before reuse Do not breathe dust/fume/gas/mist/vapors/spray Do not eat, drink or smoke when using this product

Avoid contact with skin, eyes or clothing Do not breathe dust/fume/gas/mist/vapors/spray Use personal protective equipment as required

Storage**Safe storage conditions****Storage conditions**

Keep container protect from light tightly closed. Store in a cool (2-10 degree C) place.
Packed with an inert gas. Store locked up

Safe packaging material

Glass

Incompatible substances

Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Control parameters

Not regulated

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Personal protective equipment**Respiratory protection**

gas mask for organic gas

Hand protection

Protective gloves

Eye protection

protective eyeglasses or chemical safety goggles

Skin and body protection

Long-sleeved work clothes, protective boots

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form	slightly yellow ~ yellow liquid
Odor	No data available
pH	
Melting point/freezing point	No data available
Boiling point, initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits	
Upper :	No data available
Lower :	No data available
Vapour pressure	No data available
Vapour density	No data available
Specific Gravity (relative density)	No data available
Solubilities	water , ethanol , methanol and acetone : soluble .
n-Octanol/water partition coefficient: (log Pow)	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity (coefficient of viscosity)	No data available
Dynamic viscosity	No data available

Section 10: STABILITY AND REACTIVITY**Stability****Stability**

altered by light.

Reactivity

No data available

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

Strong oxidizing agents

Hazardous decomposition productsCarbon monoxide (CO), carbon dioxide (CO₂), Sulfur oxides (SO_x), Phosphorus oxide, Nitrogen oxides (NO_x)**Section 11: TOXICOLOGICAL INFORMATION****Acute toxicity****Oral LD50**

81.3 mg/kg (rat)

Dermal LD50

> 2000 mg/kg (rat)

Inhalation LC50

2.16 mg/l

Skin irritation/corrosion

No data available

Serious eye damage/ irritation

No data available

Respiratory or skin sensitization	No data available
Reproductive cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
STOT-single exposure	No data available
STOT-repeated exposure	No data available
Aspiration hazard	No data available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Other data No data available

Persistence and degradability No information available
 Bioaccumulative potential No information available
 Mobility in soil No information available
 Hazard to the ozone layer No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID

UN number UN2783
 Proper shipping name: Organophosphorus pesticide, solid, toxic
 UN classification 6.1
 Subsidiary hazard class 6.1
 Labels
 Packing group III
 ERG Code 6L

IMDG

UN number UN2783
 Proper shipping name: Organophosphorus pesticide, solid, toxic
 UN classification 6.1
 Subsidiary hazard class
 Packing group III
 EmS-No F-A, S-A
 Marine pollutant (Sea) Yes

IATA

UN number UN2783
 Proper shipping name: Organophosphorus pesticide, solid, toxic
 UN classification 6.1
 Subsidiary hazard class
 Packing group III
 Marine pollutant Yes

Section 15: REGULATORY INFORMATION

International Inventories

EINECS/ELINCS -
TSCA -

Japanese regulations

Fire Service Act Category IV, Class I I I petroleums, dangerous grade 3
Poisonous and Deleterious Substances Control Law Deleterious Substances 3rd. Grade

Industrial Safety and Health Act No
Act on the Evaluation of No

Chemical Substances and
Regulation of Their Manufacture,
etc

Regulations for the carriage and
storage of dangerous goods in
ship

Civil Aeronautics Law

Marine Pollution Prevention Law

Pollutant Release and Transfer No
Register Law

Water Pollution Control Act No

Gunpowder Control Law No

High Pressure Gas Safety Law No

Dangerous component

ETCO Not applicable

Section 16: OTHER INFORMATION

Literature and references

Revision Note No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z7252(2010). *JIS: Japanese Industrial Standards

End of Safety Data Sheet